CLAIM OR CLAIMS

1. A method to correct skew of a sheet being fed to a processing station, the sheet having a machine readable position locator adjacent a leading edge of the sheet with first and second portions of the position locator being associated respectively with first and second side edges respectively of the sheet wherein a proper orientation of the sheet entering the processing station being defined by an alignment of the position locator portions, the method comprising:

a) advancing the sheet continuously in a forward direction towards the processing station until only one or another of the position locator portions is detected, the detection of only one locator portion indicating a skewed orientation of the sheet relative to the processing station;

b) dithering, by stepping first rearward and then forward, a side edge of the sheet associated with the detected locator portion while continuously advancing the opposite side edge in a forward direction;

c) repeating the dithering of step (b) while continuously advancing the opposite side edge of the sheet until the locator portion associated with the opposite side edge is detected; and thereafter

d) advancing the sheet in a forward direction to the processing station.

2. A method as in Claim 1 wherein a simultaneous detecting of the first and second position locator portions occurring after said dithering causes, first, a simultaneous stepping back of both side edges followed by a continuous advancing of both side edges in a forward direction.

3. A method as in Claim 1 comprising printing the position locator on the sheet in advance of an image printed on the sheet, a leading edge of the image being parallel to the first and second portions of the image locator.

4. A method as in Claim 1 comprising engaging independently driven first and second nip rollers against opposite sides of the sheet for the continuous advancing of the sheet in a forward direction.

5. A method as in Claim 4 wherein the dithering is accomplished by repeated reversals of the rotation of the nip rollers at the side edge of the sheet associated with the detected locator portion while continuously driving the nip roller at the opposite side of the sheet in a forward direction.

6. A method as in Claim 5 wherein the dithering is at a rate of about 1 to 10 direction reversals per second.

7. A method as in Claim 6 wherein the length of each forward and rearward step during dithering is about 1 to 10 mm.

8. A method as in Claim 4 comprising:

a) providing a controller operatively connected to each of the independently driven nip rollers;

b) signaling the controller upon detecting a first portion of the position locator portion and the controller responding by causing the repeated dithering of the nip roller at the side edge of the sheet associated with the detected first portion of the position indicator while continuously driving the nip roller at the opposite side of the sheet in a forward direction; and

c) signaling the controller upon detecting the second portion of the position locator and the controller responding by:

i) stopping both the first and second nip rollers,

ii) stepping both nip rollers in a rearward direction, and then

iii) continuously driving both nip rollers and advancing the sheet in a forward direction.

9. A method to correct skew of a sheet being fed in a forward direction, the sheet having machine readable aligned first and second fiducial marks adjacent a leading edge of the sheet and parallel to the leading edge of an image on the sheet, each of the fiducial marks being associated with one of the side edges of the sheet, the method comprising:

a) engaging nip rollers along each opposite side edge of the sheet, each of the nip rollers being associated with one of the first and second fiducial marks respectively;

b) continuously driving the nip rollers forward for advancing the sheet in a forward direction until a first of the fiducial marks is detected;

c) stopping the forward driving of a first of the nip rollers associated with the first detected fiducial mark;

d) initiating the dithering of the first nip roller to repeatedly step the edge of the sheet engaged by the first nip roller first rearward and then forward, each rearward and forward step resulting in a redetection of the first of the fiducial marks;

e) continuously driving a second nip roller associated with the opposite side of the sheet in a forward direction during the dithering of the first nip roller to skew the sheet, the continuous driving of the second nip roller and skewing of the sheet continuing until the fiducial mark associated with the second nip roller is detected; and thereafter

f) restarting the continuous driving of the first and second nip rollers forward for advancing the sheet in a forward direction.

10. A method as in Claim 9 comprising:

a) stopping both the dithering of the first nip roller and the continuous driving of the second nip roller upon detecting the fiducial mark associated with the second nip roller; and

b) stepping both nip rollers rearward prior to restarting the continuous driving of the first and second nip rollers forward.

11. Apparatus to correct skew of a sheet being fed to a processing station, the sheet having aligned machine readable position locators associated respectively with first and second side edges of the sheet wherein a proper orientation of the sheet entering the processing station is defined by an alignment of the position locators, the apparatus comprising:

a) first and second aligned sensors positioned to detect passage of a respective one of the position locators;

b) independently driven first and second nip rollers engageable against respective opposite side edges of the sheet and being selectively operable to move the sheet in either a forward direction towards the processing station or in a rearward direction;

c) a controller acting responsive to the detection of a first position locator by the first sensor to dither the first nip roller by alternately stepping the first nip roller rearward and then forward while continuously operating the second nip roller in a forward direction thereby skewing the sheet; and

d) the controller acting responsive to the detection of the second position locator by the second sensor to move both nip rollers in a forward direction.

12. Apparatus as in Claim 11 wherein the nip rollers are each driven by a stepper motor.

13. Apparatus as in Claim 12 wherein the rate of the dithering of the first nip roller is about 1 to 10 direction reversals per sec.

14. Apparatus as in Claim 13 wherein the length of each forward and rearward step during dithering is about 1 to 10 mm.

15. Apparatus as in Claim 11 wherein the controller operates to stop both the dithering of the first nip roller and the continuous forward operation of the second nip roller upon detection of the second position locator by the second

sensor and thereafter steps both nip rollers rearward prior to moving both nip rollers in a forward direction.